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EXAMINER

EL CHANTI, HUSSEIN A

ART UNIT

PAPER NUMBER

2157

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/900,919	<b>Applicant(s)</b> SUZUKI, KOBUN	
	<b>Examiner</b> Kenny Lin	<b>Art Unit</b> 2152	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-43 are presented for examination.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 21 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weyand et al., U.S. Pat. No. 6,930,785 B1, in view of Selitrennikoff et al., U.S. Pat. No. 6,209,089 B1.

4. As to claim 1, Weyand et al. teach the invention substantially as claimed including a system comprising:

A central supervisory apparatus configured to include a processor (as is common in most printers, fax machines, and copiers; col. 1, lines 13-28);

a firmware download device provided in the central supervisory apparatus and configured to download prescribed updated firmware to an applicable one or more image forming apparatuses in accordance with updated hardware of the one or more image forming apparatuses (col. 2, lines 16-43); and

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a firmware update device provided in each of the image forming apparatuses and configured to update firmware of the one or more image forming apparatuses with the updated firmware when the updated firmware is downloaded (col. 2, lines 16-43).

5. Weyand et al. did not specifically teach that the central supervisory apparatus determine updated hardware in an applicable one or more of the plurality of image forming apparatuses and to download firmware in accordance with the determined updated hardware. Selitrennikoff et al. teach to detect new hardware and to locate device drivers that support the new hardware for download (abstract, col.2, lines 58-63, col.3, lines 41-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weyand et al. and Selitrennikoff et al. because Selitrennikoff et al.'s teaching of automatically adjusting system software for new hardware components enables Weyand's system to automatically install and support the software drivers for new hardware in the system without much administrator attention (see Selitrennikoff et al., col.2, lines 32-47).

6. As to claim 21, Weyand et al. teach the invention substantially as claimed including an apparatus comprising:

a firmware download device configured to download prescribed updated firmware to an applicable one or more image forming apparatuses in accordance with updated hardware of the one or more image forming apparatuses (col. 2, lines 32-43).

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7. Weyand et al. did not specifically teach that the a processor configured determine updated hardware in an applicable one or more of the plurality of image forming apparatuses and to download firmware in accordance with the determined updated hardware. Selitrennikoff et al. teach to detect new hardware and to locate device drivers that support the new hardware for download (abstract, col.2, lines 58-63, col.3, lines 41-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weyand et al. and Selitrennikoff et al. because Selitrennikoff et al.'s teaching of automatically adjusting system software for new hardware components enables Weyand's system to automatically install and support the software drivers for new hardware in the system without much administrator attention (see Selitrennikoff et al., col.2, lines 32-47).

8. As to claim 43, Weyand et al. teach the invention substantially as claimed including an apparatus, comprising:

central supervisory means for remotely supervise image forming means (col. 2, lines 32-43).

firmware download means for downloading prescribed updated firmware to an applicable one or more image forming apparatuses in accordance with updated hardware of the one or more image forming means, said firmware download means provided in the central supervisory means (col. 2, lines 32-43); and

firmware update means device for updating firmware of the one or more image forming apparatuses with the updated firmware when the updated firmware is downloaded, said firmware update means being provided in each of the image forming means (col. 2, lines 32-43).

9. Weyand et al. did not specifically teach that the a processor configured determine updated hardware in an applicable one or more of the plurality of image forming apparatuses and to download firmware in accordance with the determined updated hardware. Selitrennikoff et al. teach to detect new hardware and to locate device drivers that support the new hardware for download (abstract, col.2, lines 58-63, col.3, lines 41-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weyand et al. and Selitrennikoff et al. because Selitrennikoff et al.'s teaching of automatically adjusting system software for new hardware components enables Weyand's system to automatically install and support the software drivers for new hardware in the system without much administrator attention (see Selitrennikoff et al., col.2, lines 32-47).

10. Claims 2-9, 11-17, 22-33 and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weyand et al., U.S. Pat. No. 6,930,785 B1, and Selitrennikoff et al., U.S. Pat. No. 6,209,089 B1, as applied to claims 1, 21 and 43 above, and further in view of Weinberger, et al. U.S. Pat. No. 6,009,284.

11. As to claim 2, Weyand et al. and Selitrennikoff et al. do not teach wherein the updated hardware includes a control baseboard unit or a unit. Weinberger et al. teach apparatus, wherein the updated hardware includes a control baseboard unit or a unit (inherent; fig. 1, 2, 3 and 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because

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that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

12. As to claim 3, Weyand et al. and Selitrennikoff et al. do not teach wherein the updated hardware includes one or more non-volatile memories configured to store prescribed firmware. Weinberger et al. teach apparatus, wherein the updated hardware includes one or more non-volatile memories configured to store prescribed firmware (col. 6, lines 1-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

13. As to claim 4, Weyand et al. and Selitrennikoff et al. do not teach apparatus, further comprising: hardware read device to read hardware information; hardware information transmission device to transmit hardware information; database provided in the central supervisory apparatus and to store hardware information; and database update device to update database based upon the hardware information.

14. Weinberger et al. teach apparatus, further comprising: a hardware read device configured to read hardware information of each of the plurality of image forming apparatuses (inherent because of user interface and translator; item 60 and 6; fig. 1); a hardware information transmission device configured to transmit the hardware information from the each of the

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plurality of image forming apparatuses to the central supervisory apparatus (inherent; col. 3, line 52- col. 4, line 9; fig. 1); a database provided in the central supervisory apparatus and configured to store hardware information of the plurality of image forming apparatuses (col. 4, lines 3-9); and a database update device configured to update the database based upon the hardware information when receiving the hardware information from the one or more image forming apparatuses (inherent; col. 13, lines 23-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

15. As to claims 5 and 11, Weyand et al. and Selitrennikoff et al. do not teach wherein said hardware information is transmitted therefrom when power is supplied to the image forming apparatus. Weinberger et al. teach apparatus, wherein said hardware information is transmitted therefrom when power is supplied to the image forming apparatus (inherent; col. 3, line 52- col. 4, line 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

16. As to claims 6 and 12, Weyand et al. and Selitrennikoff et al. do not teach wherein the hardware information is periodically transmitted at a prescribed interval. Weinberger et al. teach



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apparatus, wherein the hardware information is periodically transmitted at a prescribed interval (inherent; col. 7, lines 6-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

17. As to claims 7 and 13, Weyand et al. and Selitrennikoff et al. do not teach wherein the hardware information is transmitted when prescribed communications are performed between the one or more applicable image forming apparatuses and the central supervisory apparatus. Weinberger et al. teach apparatus, wherein the hardware information is transmitted when prescribed communications are performed between the one or more applicable image forming apparatuses and the central supervisory apparatus (via translator, fig. 1; inherent because of user interface; item 60, fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

18. As to claims 8, 14 and 15, Weyand et al. and Selitrennikoff et al. do not teach further comprising a hardware read instruction transmission device provided in the central supervisory system and configured to transmit the hardware instruction to the applicable one or more image forming apparatuses, wherein said hardware information is transmitted when the applicable one or more image forming apparatuses receives the hardware read instruction. Weinberger et al.

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teach apparatus, further comprising a hardware read instruction transmission device provided in the central supervisory system and configured to transmit the hardware instruction to the applicable one or more image forming apparatuses, wherein said hardware information is transmitted when the applicable one or more image forming apparatuses receives the hardware read instruction (inherent because of user interface and translator; item 60 and 6; fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

19. As to claim 9, Weyand et al. and Selitrennikoff et al. do not teach apparatus, comprising: a hardware information storage device provided in each of the plurality of image forming apparatuses and configured to store its own hardware information. Weinberger et al. teach apparatus, further comprising: a hardware information storage device (i.e. database) provided in each of the plurality of image forming apparatuses and configured to store its own hardware information (col. 4, lines 3-9); and a hardware information update device configured to update its own hardware information (inherent; col. 13, lines 23-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

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20. As to claim 16, Weyand et al. do not teach apparatus, comprising: a conformity check device provided in the firmware download device configured to check conformity of the supervisory information including at least the hardware information with the updated firmware, wherein said updated firmware is downloaded if the supervisory information conforms to the updated firmware. Weinberger et al. teach apparatus, further comprising: a conformity check device provided in the firmware download device configured to check conformity of the supervisory information including at least the hardware information with the updated firmware, wherein said updated firmware is downloaded if the supervisory information conforms to the updated firmware (because of interrupt driven; col. 7, lines 6-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

21. As to claim 17, Weyand et al. and Selitrennikoff et al. do not teach apparatus, comprising: wherein the updated firmware is regenerated so as to conform to the supervisory information, if the supervisory information does not conform to the updated firmware. Weinberger et al. teach apparatus, wherein the updated firmware is regenerated so as to conform to the supervisory information, if the supervisory information does not conform to the updated firmware (since the translator periodically evaluates the condition of the copier; col. 7, lines 6-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al.

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because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

22. As to claim 22, Weyand et al. and Selitrennikoff et al. do not teach wherein the updated hardware includes a control baseboard unit. Weinberger et al. teach apparatus, wherein the updated hardware includes a control baseboard unit (inherent; fig. 1, 2, 3 and 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

23. As to claim 23, Weyand et al. and Selitrennikoff et al. do not teach wherein the updated hardware includes one or more non-volatile memories configured to store prescribed firmware. Weinberger et al. teach apparatus, wherein the updated hardware includes one or more non-volatile memories configured to store prescribed firmware (col. 6, lines 1-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

24. As to claim 24, Weyand et al. and Selitrennikoff et al. do not teach a firmware update device configured to update firmware of the image forming apparatuses with the updated

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firmware when the updated firmware is downloaded. Weinberger et al. teach apparatus, further comprising a firmware update device configured to update firmware of the image forming apparatuses with the updated firmware when the updated firmware is downloaded (inherent; fig. 1, 2,3 and 4; col. 13, lines 23-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

25. As to claim 25, Weyand et al. and Selitrennikoff et al. do not teach apparatus comprising: a hardware read device configured to read hardware information thereof and a hardware information transmission device configured to transmit the hardware information to the central supervisory apparatus. Weinberger et al. teach apparatus, further comprising: a hardware read device configured to read hardware information thereof (via translator; fig. 1); and a hardware information transmission device configured to transmit the hardware information to the central supervisory apparatus (inherent because of user interface; item 60, fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

26. As to claims 26 and 35, Weyand et al. and Selitrennikoff et al. do not teach apparatus, wherein said hardware information is transmitted therefrom to the central supervisory apparatus

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when power is supplied thereto. Weinberger et al. teach apparatus, wherein said hardware information is transmitted therefrom to the central supervisory apparatus when power is supplied thereto (inherent; col. 3, line 52- col. 4, line 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

27. As to claims 27 and 36, Weyand et al. and Selitrennikoff et al. do not teach apparatus, wherein the hardware information is periodically transmitted at a prescribed interval.

Weinberger et al. teach apparatus, wherein the hardware information is periodically transmitted at a prescribed interval (inherent; col. 7, lines 6-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

28. As to claims 28, 37 and 40, Weyand et al. and Selitrennikoff et al. do not teach wherein said hardware information is transmitted therefrom when prescribed communications are performed with the center system. Weinberger et al. teach apparatus, wherein said hardware information is transmitted therefrom when prescribed communications are performed with the center system (inherent; col. 3, line 52- col. 4, line 9). Therefore, it would have been obvious to

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one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

29. As to claim 29, Weyand et al. and Selitrennikoff et al. do not teach apparatus, comprising: a database configured to store hardware information; and a database update device configured to update database based upon the hardware information. Weinberger et al. teach apparatus, further comprising: a database configured to store hardware information of the plurality of image forming apparatuses (col. 4, lines 3-9); and a database update device configured to update the database based upon the hardware information when receiving the hardware information from the one or more image forming apparatuses (inherent; col. 13, lines 23-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

30. As to claim 30, Weyand et al. and Selitrennikoff et al. do not teach a hardware read instruction transmission device configured to transmit the hardware instruction to the applicable one or more image forming apparatuses. Weinberger et al. teach apparatus, further comprising a hardware read instruction transmission device configured to transmit the hardware instruction to the applicable one or more image forming apparatuses (inherent because of user interface and

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translator; item 60 and 6; fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

31. As to claims 31 and 38, Weyand et al. and Selitrennikoff et al. do not teach wherein said hardware information is transmitted therefrom when receiving the hardware read instruction. Weinberger et al. teach apparatus, wherein said hardware information is transmitted therefrom when receiving the hardware read instruction (inherent; col. 3, line 52- col. 4, line 9; fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

32. As to claims 32 and 39, Weyand et al. and Selitrennikoff et al. do not teach apparatus, comprising: a hardware information storage device (i.e. database) configured to store hardware information related to the plurality of image forming apparatuses; and a hardware information update device configured to update the hardware information. Weinberger et al. teach apparatus, further comprising: a hardware information storage device (i.e. database) configured to store hardware information related to the plurality of image forming apparatuses (col. 4, lines 3-9); and a hardware information update device configured to update the hardware information (inherent; col. 13, lines 23-48). Therefore, it would have been obvious to one of ordinary skill in



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the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

33. As to claim 33, Weyand et al. and Selitrennikoff et al. do not teach apparatus, comprising: a hardware information storage device configured to store hardware information thereof; and a hardware information update device configured to update the hardware information. Weinberger et al. teach apparatus, further comprising: a hardware information storage device (i.e. database) configured to store hardware information thereof (col. 4, lines 3-9); and a hardware information update device configured to update the hardware information (inherent; col. 13, lines 23-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

34. As to claim 41, Weyand et al. and Selitrennikoff et al. do not teach a conformity check device provided in the firmware download device configured to check conformity of the supervisory information including at least the hardware information with the updated firmware, wherein said updated firmware is downloaded if the supervisory information conforms to the updated firmware.

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35. Weinberger et al. teach apparatus, further comprising: a conformity check device provided in the firmware download device configured to check conformity of the supervisory information including at least the hardware information with the updated firmware, wherein said updated firmware is downloaded if the supervisory information conforms to the updated firmware (because of interrupt driven; col. 7, lines 6-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

36. As to claim 42, Weyand et al. and Selitrennikoff et al. do not teach apparatus, wherein the updated firmware is regenerated so as to conform to the supervisory information, if the supervisory information does not conform to the updated firmware. Weinberger et al. teach apparatus, wherein the updated firmware is regenerated so as to conform to the supervisory information, if the supervisory information does not conform to the updated firmware (since the translator periodically evaluates the condition of the copier; col. 7, lines 6-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weyand et al., Selitrennikoff et al. and Weinberger et al. because that would provide automatic monitoring of copier status, in real time or quasi real time including error conditions, from a central location (col. 2, lines 2-4).

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37. Claims 10 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weyand et al., Selitrennikoff et al. and Weinberger et al. as applied to claims 9 and 33 above, and further in view of Kikuchi et al. U.S. Pat. No. 5,552,901.

38. As to claim 10, Weyand et al., Selitrennikoff et al. and Weinberger et al. do not teach a version number of the hardware, hardware information stored in the hardware information storage device and update when the at least a version number does conform to the hardware information. Kikuchi et al. teach a version number of the hardware (i.e. telephone number and user identifiers), hardware information stored in the hardware information storage device (in the address) and update when the at least a version number does conform to the hardware information (col. 6, lines 8-55). However, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Weyand et al., Selitrennikoff et al. and Weinberger et al. with Kikuchi et al. because that would provide parallel runs of business applications (col. 3, lines 51-63).

39. As to claim 34, Weyand et al., Selitrennikoff et al. and Weinberger et al. do not teach a version number of the hardware, hardware information stored in the hardware information storage device and update when the at least a version number does conform to the hardware information. Kikuchi et al. teach a version number of the hardware (i.e. telephone number and user identifiers), hardware information stored in the hardware information storage device (in the address) and update when the at least a version number does conform to the hardware information (col. 6, lines 8-55). However, it would have been obvious to one of ordinary skill in

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the art at the time of invention to modify the combination of Weyand et al., Selitrennikoff et al. and Weinberger et al. with Kikuchi et al. because that would provide parallel runs of business applications (col. 3, lines 51-63).

40. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Weinberger et al. U.S. Pat. No. 6,009,284 in view of Kikuchi et al. U.S. Pat. No. 5,552,901, Weyand et al. U.S. Pat. No. 6,930,785 B1 and Selitrennikoff et al., U.S. Pat. No. 6,209,089 B1.

41. As to claim 18, Weinberger et al. teach the invention substantially as claimed including a method, comprising the steps of:

providing a database configured to store and supervise hardware information of the plurality of image forming apparatuses (col. 4, lines 3-9);

transmitting a hardware read instruction from the central supervisory apparatus to an applicable one or more image forming apparatuses (items 60 and 6, fig. 1);

reading hardware information from hardware of the applicable one or more image forming apparatuses when power is supplied thereto (col. 3, line 52-col. 4, line 9);

comparing the read hardware information with previously stored hardware information stored in a memory (col. 7, lines 6-26);

determining if both of the read and previously stored hardware information conforms with each other (col. 7, lines 6-26);

updating the previously stored hardware information with the read hardware information when both of the read and previously stored hardware information do not conform with each other (inherent; col. 13, lines 23-48);

reading the updated hardware information (inherent; item 60 and 6, fig. 1);

transmitting the updated hardware information to central supervisory apparatus when receiving the hardware read instruction (fig. 1);

updating the database when the transmitted hardware information is received (fig. 1; col. 13, lines 23-48);

determining if supervisory information stored in the database conforms to prescribed updated firmware (col. 7, lines 6-26); and

(inherent; fig. 1,2,3 and 4; col. 13, lines 23-48).

42. However, Weinberger et al. do not teach a central supervisory apparatus configured to include a processor and a communication line. Kikuchi et al. teach a central supervisory apparatus configured to include a processor and a communication line (inherent). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of other business applications (col. 2, lines 59-62).

43. Neither Weinberger et al. nor Kikuchi et al. teach downloading the updated firmware to the applicable one or more image forming apparatuses when the supervisory information conforms to the updated firmware. Weyand et al. teach downloading the updated firmware to

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the applicable one or more image forming apparatuses when the supervisory information conforms to the updated firmware. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Weinberger et al. and Kikuchi et al. with Weyand et al. because that would provide upgrade information is selectively installed into the firmware of the imaging system (col. 2, lines 41-43).

44. Weinberger et al., Kikuchi et al. and Weyand et al. did not specifically teach to update the database when the transmitted updated hardware information is received and determine if supervisory information stored in the database conforms to prescribed updated firmware corresponding to the updated hardware information. Selitrennikoff et al. teach to detect new hardware and to locate device drivers that support the new hardware for download (abstract, col.2, lines 58-63, col.3, lines 41-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weinberger et al., Kikuchi et al. and Weyand et al. and Selitrennikoff et al. because Selitrennikoff et al.'s teaching of automatically adjusting system software for new hardware components enables Weinberger et al., Kikuchi et al. and Weyand et al.'s system to automatically install and support the software drivers for new hardware in the system without much administrator attention (see Selitrennikoff et al., col.2, lines 32-47).

45. As to claim 19, Weinberger et al. teach the invention substantially as claimed including a method, comprising the steps of:

providing a database configured to store and supervise hardware information of the plurality of image forming apparatuses (col. 4, lines 3-9);

transmitting a hardware read instruction from the central supervisory apparatus to an applicable one or more image forming apparatuses (items 60 and 6, fig. 1);

periodically reading hardware information from hardware of the applicable one or more image forming apparatuses (col. 7, lines 6-26; col. 3, line 52-col. 4, line 9);

comparing the read hardware information with previously stored hardware information stored in a memory (col. 7, lines 6-26);

determining if both of the read and previously stored hardware information conforms with each other (col. 7, lines 6-26);

updating the previously stored hardware information with the read hardware information when both of the read and previously stored hardware information do not conform with each other (inherent; col. 13, lines 23-48);

reading the updated hardware information (inherent; item 60 and 6, fig. 1);

transmitting the updated hardware information to central supervisory apparatus when receiving the hardware read instruction (fig. 1);

updating the database when the transmitted hardware information is received (fig. 1; col. 13, lines 23-48);

determining if supervisory information stored in the database conforms to prescribed updated firmware (col. 7, lines 6-26).

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46. Weinberger et al. do not teach a central supervisory apparatus configured to include a processor and a communication line. Kikuchi et al. teach a central supervisory apparatus configured to include a processor and a communication line (inherent)). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of other business applications (col. 2, lines 59-62).

47. However, neither Weinberger et al. nor Kikuchi et al. teach downloading the updated firmware to the applicable one or more image forming apparatuses when the supervisory information conforms to the updated firmware. Weyand et al. teach downloading the updated firmware to the applicable one or more image forming apparatuses when the supervisory information conforms to the updated firmware. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Weinberger et al. and Kikuchi et al. with Weyand et al. because that would provide upgrade information is selectively installed into the firmware of the imaging system (col. 2, lines 41-43).

48. Weinberger et al., Kikuchi et al. and Weyand et al. did not specifically teach to update the database when the transmitted updated hardware information is received and determine if supervisory information stored in the database conforms to prescribed updated firmware corresponding to the updated hardware information. Selitrennikoff et al. teach to detect new hardware and to locate device drivers that support the new hardware for download (abstract, col.2, lines 58-63, col.3, lines 41-53). It would have been obvious to one of ordinary skill in the



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art at the time the invention was made to combine the teachings of Weinberger et al., Kikuchi et al. and Weyand et al. and Selitrennikoff et al. because Selitrennikoff et al.'s teaching of automatically adjusting system software for new hardware components enables Weinberger et al., Kikuchi et al. and Weyand et al.'s system to automatically install and support the software drivers for new hardware in the system without much administrator attention (see Selitrennikoff et al., col.2, lines 32-47).

49. As to claim 20, Weinberger et al. teach the invention substantially as claimed including a method, comprising the steps of:

providing a database configured to store and supervise hardware information of the plurality of image forming apparatuses (col. 4, lines 3-9);

transmitting a hardware read instruction from the central supervisory apparatus to an applicable one or more image forming apparatuses (items 60 and 6, fig. 1);

reading hardware information from hardware of the applicable one or more image forming apparatuses when prescribed communications are performed between the applicable one or more image forming apparatuses and the central supervisory apparatus (col. 7, lines 6-26; col. 3, line 52-col. 4, line 9);

comparing the read hardware information with previously stored hardware information stored in a memory (col. 7, lines 6-26);

determining if both of the read and previously stored hardware information conforms with each other (col. 7, lines 6-26);

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updating the previously stored hardware information with the read hardware information when both of the read and previously stored hardware information do not conform with each other (inherent; col. 13, lines 23-48);

reading the updated hardware information (inherent; item 60 and 6, fig. 1);

transmitting the updated hardware information to central supervisory apparatus when receiving the hardware read instruction (fig. 1);

updating the database when the transmitted hardware information is received (fig. 1; col. 13, lines 23-48);

determining if supervisory information stored in the database conforms to prescribed updated firmware (col. 7, lines 6-26).

50. Weinberger et al. do not teach a central supervisory apparatus configured to include a processor and a communication line. Kikuchi et al. teach a central supervisory apparatus configured to include a processor and a communication line (inherent) (fig. 4, 16 and 17). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of other business applications (col. 2, lines 59-62).

51. However, neither Weinberger et al. nor Kikuchi et al. teach downloading the updated firmware to the applicable one or more image forming apparatuses when the supervisory information conforms to the updated firmware. Weyand et al. teach downloading the updated firmware to the applicable one or more image forming apparatuses when the supervisory

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information conforms to the updated firmware. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Weinberger et al. and Kikuchi et al. with Weyand et al. because that would provide upgrade information is selectively installed into the firmware of the imaging system (col. 2, lines 41-43).

52. Weinberger et al., Kikuchi et al. and Weyand et al. did not specifically teach to update the database when the transmitted updated hardware information is received and determine if supervisory information stored in the database conforms to prescribed updated firmware corresponding to the updated hardware information. Selitrennikoff et al. teach to detect new hardware and to locate device drivers that support the new hardware for download (abstract, col.2, lines 58-63, col.3, lines 41-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Weinberger et al., Kikuchi et al. and Weyand et al. and Selitrennikoff et al. because Selitrennikoff et al.'s teaching of automatically adjusting system software for new hardware components enables Weinberger et al., Kikuchi et al. and Weyand et al.'s system to automatically install and support the software drivers for new hardware in the system without much administrator attention (see Selitrennikoff et al., col.2, lines 32-47).

### ***Response to Arguments***

53. Applicant's arguments with respect to claims 1-43 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

54. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


55. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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ksl  
May 10, 2006



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